Miscellaneous Notes on Ammophila (Hymenoptera, Sphecidae)

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Most of the following data are the result of type studies by the author. In addition, R. M. Bohart, University of California, took valuable notes on some *Ammophila* types in European museums which have enabled me to designate lectotypes for a few species. I would like to thank the following curators for lending types in their care (abbreviations enclosed in brackets are used when referring to these collections): Hugo Anderson, Zoological Institute, University, Lund (Lund); F. Español, Instituto Municipal de Ciencias Naturales, Museo de Zoologia, Barcelona (Barcelona); Dr. Gross, Landeshaupstat Wiesbaden, Städtisches Museum, Wiesbaden (Wiesbaden). Other type depositories cited are: Museum of Comparative Zoology, Harvard University (MCZ); United States National Museum (USNM); British Museum (Natural History) (BMNH); Museo Civico di Storia Naturale, Genoa (Genoa); Museum National d'Histoire Naturelle, Paris (Paris).

Ammophila mutica Dahlbom

Ammophila mutica Dahlbom, 1845, Hymen. Europea, vol. 1, fasc. 3, p. 431. Holotype (gynandromorph), "Brasilia" (Lund).

Ammophila moneta Smith, 1856, Cat. Hymen. Insects Brit. Mus. 4: 219. Lectotype ♀, Brazil (BMNH type #21.794b). Present designation. New synonymy.

Ammophila fragilis Smith, 1856, Cat. Hymen. Insects Brit. Mus. 4: 219. Lectotype ♀, Brazil (BMNH type #21.796). Present designation. New synonymy.

? *Ammophila pilimarginata* Cameron, 1912, Timehri, Jour. Royal Agric. Comm. Soc. Brit. Guiana 2: 429. Holotype ♂, Demarara, British Guyana (BMNH). *Teste* Richards, 1937.

I have examined the type of Dahlbom's long forgotten *Ammophila mutica,* and found that it is the common South American species usually referred to as *fragilis* Smith. Bohart's notes

on the types of *fragilis* and *moneta* indicate they are synonymous with *mutica*. Richards (1937) synonymized *pilimarginata* Cameron with *fragilis* after comparison of the types of the two species. I place Cameron's name here only tentatively however, until I can personally study the type.

The type of *mutica* is a partial gynandromorph. The left half of the head, prothorax and mesothorax, including associated appendages, is male. The metathorax and abdomen appear to be female. Dahlbom seems to have been aware of this condition since his label on the type says, "Ammoph. mutica nov. sp. ♂, ♀," In *A. mutica* the abdomen may be completely black or display varying amounts of red on the second petiole and first gastral segments. Dahlbom's type is the all black form.

Ammophila lampei Strand

Ammophila chilensis nigripes Reed, 1894, Anal. Univ. Chile 85: 622. Holotype ♀, Valparaiso, Chile (MCZ). Preoccupied by *Ammophila nigripes* Smith, 1856.

Ammophila lampei Strand, 1910, Jahrb. Nassauischen Vereins Nat. Wiesbaden 63: 13. Lectotype ♀, Guaqui, Peru (*recte* Bolivia) (WIESBADEN). Present designation.

Sphex peruvianus Rohwer, 1913, Proc. U. S. Natl. Mus. 44: 453. Holotype ♀, Cuzco, Peru (USNM). New synonymy.

I have examined the types of *nigripes, lampei* and *peruvianus*. The coarse close punctation of the meso- and metathorax and the greatly swollen clypeus of the female are distinctive. The clypeus of the male is covered with silver pubescence, but elsewhere the only appressed silver pubescence on the body occurs on the pronotal lobe and at either side of the petiole socket in the two sexes. The head, thorax and legs are black. The tegulae vary from reddish brown to black. In some specimens only the second petiole segment is red, while in others the entire petiole and first gastral segment may be red. Intermediate color forms also exist.

Ammophila lampei appears to be a high altitude species. The specimens I have examined were collected at elevations ranging from 9,000 to 12,000 feet in southern Peru, Bolivia and northern Chile.

Ammophila rufipes Guérin-Méneville

Ammophila rufipes Guérin-Méneville, 1831, Vol. autour Monde la Coquille, Atlas plate 9, fig. 1. Holotype ♀, Lima, Peru (GENOA).

? *Ammophila variolosa* Giner Mari, 1944, Bol. Soc. Española Hist. Nat. 42: 351. Lectotype ♂, Lima, Peru (BARCELONA). Present designation.

I have studied one of Giner Mari's syntypes of *variolosa* and have selected it as lectotype. *A. variolosa* probably is the same as *rufipes* but I have not seen Guérin-Méneville's type and Bohart's notes on it are not sufficient for purposes of synonymy. Homotypes of *variolosa* are in the author's collection.

Ammophila apicalis Guérin-Méneville and **Ammophila apicalis** Brullé

The works in which these two species were described were published in the 1830's. The title pages of the volumes concerned have compound dates printed on them: 1829–1844 in the case of Guérin-Méneville's work and 1836–1844 in Brullé's paper. Because of confusion as to the dates of publication both species have received new names. In 1856, F. Smith renamed Brullé's *apicalis* as *terminata,* apparently using the first year of publication indicated in each work to determine priority. In 1897 Dalla Torre renamed Guérin-Méneville's *apicalis* as *guerinii.* He used 1840 as the publication date for Brullé's species and 1845 for *apicalis* Guérin-Méneville. It is now known that Smith's action in renaming *apicalis* Brullé was correct, although his dates were not. Stearn (1937) and Van der Vecht (1957) have cleared up the dates of publication of the two works. Accordingly, the proper citation and synonymy of both species is given below.

Ammophila apicalis Guérin-Méneville

Ammophilus apicalis Guérin-Méneville, 1835. Iconographie Regne Animal, Planches des Animaux-Invertebres, pl. 70, fig. 3. (Text, 1844, p. 435). Holotype ♂, Cuba (GENOA).

Ammophila guerinii Dalla Torre, 1897. Cat. Hymenopterorum, 8: 400. New name for *Ammophila apicalis* Guérin-Méneville.

In using *Ammophilus* instead of *Ammophila* Guérin-Méneville compounded Latreille's 1802 error of emending Kirby's name *Ammophila* to *Ammophylus*. Guérin-Méneville refers to Latreille's *Ammophylus* at the beginning of the description of *A. apicalis*. The 1835 date of publication for *apicalis* Guérin-Méneville has priority over 1844 because it satisfies the "indication" requirement of Article 16 (a) (viii) of the International Code of Zoological Nomenclature, 1961.

Bohart studied the type of *apicalis* in Genoa. The specimen is labeled female but it is a male. *A. apicalis* appears to be the only species of *Ammophila* occurring in the West Indies, and it is very similar to *A. pictipennis* Walsh, a common species in the Eastern half of the United States. *A. apicalis,* however, has appressed silver pubescence on the face and pronotum in both sexes. The aedeagus and subgenital plate are nearly identical in the two species.

Ammophila terminata Smith

Ammophila apicalis Brullé, 1839, Hist. Nat. Iles Canaries 10 (livr. 44) : 92 (livr. 50, pl. 3, fig. 22, 1840). Holotype (sex unknown), Canary Islands (? Paris).

Ammophila terminata Smith, 1856. Cat. Hymen. Insects Coll. Brit. Mus. 4 : 210. New name for *Ammophila apicalis* Brullé.

This is an Old World species with a Mediterranean distribution.

Ammophila retusa Gistel

Ammophilus retusus Gistel, 1848, Naturges. Thierreichs Hohere Schulen, p. 142, pl. 12, fig. 28 (figure labeled *Ammophila retusa*).

Ammophila retusus Gistel, 1850, Handb. Naturges. Reiche, p. 466 (exact reprint of 1848 description but lacks figure).

This name does not appear in Dalla Torre's Catalogus Hymenopterorum and seems to have been overlooked by all European workers on the genus. This oversight probably stems from the fact that Gistel's works are rare.

Gistel's characterization of *retusa* is very brief and hardly can be called a description. However his color figure of the

wasp gives some indication of the appearance of the insect. The second petiole segment and the first two gastral segments are red, with the remainder of the wasp black. Gistel's brief description is as follows: "Hieher *Ammophilus* mit Gattung *retusus* (gebogene), der seine Tier an Wegrändern in Locher legt; ganz schwarz; Mittelleib roth. In Deutschland. Wie *S. sabulosa.*" This description is placed after a discussion of the appearance and habits of *Ammophila sabulosa* (Linn.).

The abdominal coloration would seem to eliminate the possibility of synonymizing *retusa* with *sabulosa* or *pubescens* Curtis, since these latter two species usually have the second gastral tergite black or only red basally. However, *A. campestris* Latreille commonly has the second gastral tergite completely red and it would seem best to synonymize Gistel's name with this species. Gistel's types, if still in existence, probably are in the museum in Munich, Germany.

Ammophila grandis Gistel

Ammophila grandis Gistel, 1857, Achthundert und Zwanzig neue oder unbeschriebene wirbellose Thiere, p. 45. Trieste, Italy.

This is another Gistel name which has escaped notice since its description. The original description is as follows: "A. nigra, fronte argenteo-sericea; abdominis segmentis duobus medianis rubris; alis infumatis. Long. 2 poll. Tergestum." Strand (1917) in his discussion of Gistel's paper listed *A. grandis* but did not attempt to identify the species. In view of the inadequate description this name probably should be suppressed on the basis of the 50 year rule (Article 23 (b), International Code of Zoological Nomenclature, 1961).

Ammophila pubescens Curtis

Ammophila pubescens Curtis, 1829–30. Guide Arrang. Brit. Insects, p. 122. Nomen nudum.

Ammophila pubescens Curtis, 1836. British Ento. 13: pl. 604.

Miscus arvensis Dahlbom, 1843. Hymenoptera, Europaea 1 (fasc. 1): 8. Holotype ♂, "Pensylv." (Lund). New synonymy.

Ammophila adriaansei Wilcke, 1945. Ent. Bericht. 11: 278. Holotype (sex unknown), Holland (type depository unknown).

I have studied Dahlbom's type of *arvensis*. It compares very favorably with material identified as *pubescens* by J. de Beaumont and J. LeClercq. The genitalia are missing on the type. Wilcke's description of *adriaansei* fits the type of *arvensis* except that the fourth abdominal segment (second gastral) is all black in *arvensis*. Undoubtedly the type of *arvensis* is of European origin but was mislabeled.

Both Fernald (1931, 1934) and Murray (1938 and 1951) considered *arvensis* a New World species. Considering that Fernald studied the type himself it is incredible that he applied Dahlbom's name to the United States species that has been masquerading under this name. The type of *arvensis* does not resemble the species called *arvensis* by Fernald. Since no other name exists for Fernald's *"arvensis"* I have recently described it as a new species, *A. evansi* Menke (1964).

Ammophila leclercqi Menke, new name

Ammophila yarrowi Leclercq, 1961, Rev. Española. Ent. 37 (2): 211. Holotype ♀, Extremadura, Badajoz, Spain (BMNH). Preoccupied by *Ammophila yarrowi* Cresson, 1876 (= *aberti* Haldeman, 1853).

Unfortunately Prof. LeClercq was unaware of Cresson's name when he described *yarrowi*. I take pleasure in renaming this species after Prof. LeClercq in recognition of his numerous contributions to Sphecid taxonomy.

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A Flea Named for Michael Grzimek

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High up on the Rim of Ngorongoro Crater, where the road from the south first threatens to fall into this vast pit and where one gets his first breath-taking view of the floor of this gigantic cauldron, which is eleven miles across, there sits a simple monument of native Tanganyika stone beneath which rests as perpetual warden so that the "Serengeti Shall Not Die" the body of young 25 year old Michael Grzimek. Young Michael and his father, who is director of the Frankfurt, Germany, zoo, had, for some years, been studying the migration routes of the tremendous numbers of game animals in the Serengeti and the Ngorongoro of northcentral Tanganyika, East Africa. On the morning of January 10, 1959, an African scout knocked on the door of the research hut of the senior Grzimek, entered and handed the doctor a note from the local game warden. It read: "I am sorry to tell you that Michael has crashed his aeroplane and been killed. He is lying at my house." That afternoon young Grzimek was laid to rest in a position to look forever